

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7600

Investigation into (1) whether Entergy Nuclear Vermont )  
Yankee, LLC, and Entergy Nuclear Operations, )  
Inc.,(collectively, "Entergy VY"), should be required to cease )  
operations at the Vermont Yankee Nuclear Power Station, or )  
take other ameliorative actions, pending completion of repairs )  
to stop releases of radionuclides, radioactive materials, and, )  
potentially, other non-radioactive materials into the )  
environment; (2) whether good cause exists to modify or )  
revoke the 30 V.S.A. § 231 Certificate of Public Good issued )  
to Entergy VY; and (3) whether any penalties should be )  
imposed on Entergy VY for any identified violations of )  
Vermont statutes or Board orders related to the releases )

Order entered: 2/25/2010

**ORDER OPENING INVESTIGATION  
AND NOTICE OF PREHEARING CONFERENCE**

**Introduction**

In today's Order, the Public Service Board ("Board") opens an investigation into whether Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (collectively "Entergy VY") should be required to cease operations at the Vermont Yankee Nuclear Power Station ("Vermont Yankee"), or take other ameliorative actions, pending completion of repairs to stop releases of radionuclides, radioactive materials, and, potentially, other non-radioactive materials into the environment. This investigation will also consider whether good cause exists to modify or revoke the Certificate of Public Good ("CPG") that the Board issued to Entergy VY pursuant to 30 V.S.A. § 231 on June 13, 2002, in Docket No. 6545, and whether any penalties should be imposed on Entergy VY for any identified violations of Vermont statutes or Board orders related to those releases.

**Background**

In the currently pending Docket No. 7440, the Board is considering the petition of Entergy VY for authority to continue operation of Vermont Yankee after March 21, 2012 (when

its current authority ends). In that docket, the Department of Public Service ("Department") filed a letter on January 14, 2010, stating that Entergy VY had not provided accurate information to the Department or its contractor Nuclear Safety Associates ("NSA") in conjunction with the reliability assessment of Vermont Yankee required by Act 189 of the 2007–2009 Vermont Legislature. The Department's letter indicated that Entergy VY had incorrectly informed the Department and NSA that no underground pipes existed that fell within the statutory directive, when in fact such pipes did exist, thus raising questions about whether the requirements of Act 189 had been met. On January 25 and 26, respectively, Conservation Law Foundation ("CLF") and the New England Coalition ("NEC") also filed requests in Docket No. 7440 for the Board to take further steps in response to the new information on underground piping, as well as the recent discovery of tritium in monitoring wells surrounding Vermont Yankee. NEC and CLF also stated that this new information indicated that sworn testimony provided by Entergy VY witnesses to this Board was inaccurate.

In its January 25 letter, CLF included a request that the Board order Entergy VY to show cause why "[p]ending complete repairs of any leaks, immediate shutdown of the facility should not be required to avoid environmental harm from the leaks of radioactive material and radionuclides into groundwater."<sup>1</sup>

In Docket No. 7440, on February 3, 2010, Entergy VY filed a Memorandum in Opposition to CLF's show-cause request; on February 10, CLF and NEC each filed a reply to Entergy VY's Memorandum.<sup>2</sup>

In an Order issued in Docket No. 7440 on February 25, 2010, we concluded that CLF's request for a show-cause order should be addressed in a new proceeding, rather than in the existing Docket No. 7440. The current Order opens that new proceeding.

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1. CLF letter of January 25, 2010, at 3.

2. Later on February 10, CLF filed a corrected page 9 to its reply.

### **Positions of the Parties**

In its request for an order to show cause, CLF contends that the leaking radionuclides and radioactive material:

likely pose the threat of environmental harm to both groundwater and surface water. As the source of these leaks has not been identified, it is reasonable for the Board to determine that continued operation of the facility increases the environmental threat. The Board should order an investigation into whether these leaks and the conditions that led to them present cause to amend or revoke Entergy's Certificate of Public Good. The Board should further order Entergy to show cause why immediate shutdown of the facility should not be required to avoid unnecessary environmental harm from the leak of radioactive material and radionuclides into groundwater.<sup>3</sup>

Entergy VY maintains that CLF has failed to identify "any particular Board statute, order or condition that has been violated and would provide any colorable justification for a show-cause order," nor any "board case authority that would support the extraordinary remedy of a show-cause order in the present circumstances."<sup>4</sup> Entergy VY further asserts that CLF has not

presented any support for the assumptions in its request that the station cannot continue to be safely operated while Entergy VY investigates and addresses the source of the tritium, that continued operation would impede the investigation or that a shut down of the station would substantially mitigate or resolve the tritium issue.<sup>5</sup>

Entergy VY also contends that the requested show-cause order cannot be issued in Docket No. 7440. Entergy VY contends that CLF's request "does not pertain to or arise from the subject matter of this docket,"<sup>6</sup> which involves a review of Entergy VY's petition for a certificate of public good, brought pursuant to 30 V.S.A. §§ 231 and 248 and Chapter 157 of Title 10, V.S.A., for continued operation of Vermont Yankee.

Entergy VY next asserts that CLF has not addressed the "foundational issue" of the Board's jurisdiction to order the immediate shut down of Vermont Yankee. According to

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3. CLF January 25 letter at 5 (footnote omitted).

4. Entergy VY February 3 Opposition at 7 (footnote omitted).

5. Entergy VY February 3 Opposition at 7 n. 6.

6. Entergy VY Memorandum in Opposition at 7.

Entergy VY, the shut down that CLF seeks would be based on radiological safety concerns, and the Board is preempted from regulating the radiological safety of commercial nuclear-power plants.

Finally, Entergy VY notes that "the [Nuclear Regulatory Commission ("NRC")] and state agencies with jurisdiction over radiation levels and groundwater at the VY Station are actively involved in and monitoring the current situation."<sup>7</sup> Entergy VY maintains that no Board action is needed, and that instead the Board should defer to these federal and state agencies with direct jurisdiction over the issues related to the leaks.

In its response to Entergy VY, CLF maintains that the Board has broad jurisdiction over Entergy VY's operation of Vermont Yankee, pursuant to 30 V.S.A. §§ 2, 30, 203, 209, and 231, and under the CPG that the Board issued to Entergy VY. CLF contends that these provisions of law

give the Board clear legal authority to act and enforce its orders and the terms of any CPG it issues and to ensure that companies under Board jurisdiction operate in compliance with the law. They allow the Board to amend or revoke a CPG, and to restrain a company from violating the law. This authority encompasses issuing an order to show cause when there is harm or a violation of law.<sup>8</sup>

CLF further asserts that Entergy VY has acknowledged that it has provided false information regarding the existence of underground piping, that radioactive materials and radionuclides have leaked from Vermont Yankee, and that monitoring wells have shown escalating levels of tritium over the past month. CLF contends that the high levels of tritium, by themselves, are a sufficient demonstration of harm to support the show-cause order. CLF notes that Vermont law regulates the discharge of waste to groundwater and surface water, and that Entergy VY has not sought a discharge permit for the leaks at Vermont Yankee.

CLF disputes Entergy VY's contention that the Board should defer to the other state agencies that are monitoring the leaks. According to CLF, the lack of meaningful action by those other agencies is reason for the Board to take action. Moreover, CLF asserts, the Board has an

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7. Entergy VY February 3 Opposition at 8.

8. CLF Reply 2/10/10 at 3.

independent obligation to ensure that companies under its jurisdiction comply with legal requirements.

Finally, CLF contends that the Board is not preempted from issuing the requested show-cause order. CLF asserts that there is no federal preemption because ensuring that Entergy VY complies with Vermont's environmental and public-utility laws and that it does not place an unnecessary economic burden on Vermont do not conflict with federal requirements.

NEC supports CLF's show-cause request. NEC observes that Entergy received a Certificate of Public Good under 30 V.S.A. § 231, which was based on a finding that Entergy's conduct of its business in Vermont would promote the general good of the state. NEC asserts that Vermont Yankee's release of radionuclides into the groundwater does not promote the general good of the state, and that therefore it is reasonable for the Board to require Entergy VY to show cause why its CPG should not be revoked and/or Vermont Yankee shut down pending resolution of the continued leaks. In response to Entergy VY's claim that Docket No. 7440 is not an appropriate proceeding for issuance of the requested show-cause order, NEC contends that the Board can either re-open Docket No. 6545 (in which Entergy VY received its CPG) or open a new docket.

NEC disputes Entergy VY's claim that the Board would be preempted from issuing CLF's requested show-cause order. According to NEC, the order would be to avoid environmental harm and adverse economic consequences, rather than to protect public health and safety.

Finally, NEC requests that the Board schedule a site visit to see the area affected by the tritium leak.

### **Discussion and Conclusion**

The fundamental issues raised by the parties are: (1) whether the current Docket No. 7440 is an appropriate proceeding in which to issue the requested show-cause order; (2) whether the Board is preempted from granting the ultimate relief that might flow from the requested show-cause order, i.e., shutting down Vermont Yankee; and (3) if the Board is not preempted, whether it should exercise its jurisdiction or defer action in light of the other agencies reviewing the leaks.

As explained in the Order issued today in Docket No. 7440, the Board has decided that a new proceeding should be opened to consider the issues raised by CLF's request for a show-cause order. Accordingly, we are opening the present docket for that purpose.

With respect to federal preemption, it is clearly established that the Board would be preempted from attempting to regulate Vermont Yankee based on radiological safety. However, it is also well established that the Board retains significant authority in other areas of traditional state regulation. This retained state authority includes some regulation related to the land-use and economic issues (including reliability issues) associated with nuclear material, other than matters of radiological safety.

In support of its claim that the Board would be preempted from issuing the requested show-cause order, Entergy VY cites the Board's decision in Docket No. 7082, in which the Board reviewed Entergy VY's proposal to construct a dry fuel storage facility at Vermont Yankee. In that Order, the Board explained the breadth and limits of this federal preemption. An extended quote of that Order is instructive:

We agree with Entergy VY that federal law places limitations on the state's jurisdiction. The federal government has exclusive jurisdiction over radiological safety concerns (except for enumerated areas expressly ceded to the states, such as the authority to regulate the air emission of radiation). The United States Supreme Court found that this jurisdiction over radiological safety is considered to occupy the entire field. In addition, the Nuclear Regulatory Commission ("NRC") "was given exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession and use of nuclear materials" and "[u]pon these subjects no role was left for the states." Finally, under traditional preemption principles, our jurisdiction over nuclear power plants is limited when it directly conflicts with federal jurisdiction exercised by the NRC or would frustrate the purposes of the federal regulation.

Nonetheless, Entergy VY's characterization of the extent of federal preemption is overbroad. Supreme Court precedent explicitly states that the regulation of nuclear facilities is one of dual jurisdiction, with states retaining significant authority. The Supreme Court has observed that Congress:

intended that the federal government should regulate the radiological safety aspects involved in the construction and operation of a nuclear plant, but that States retain their traditional responsibilities in the field of regulating electrical utilities for determining questions of need, reliability, cost and other related state concerns.

These other areas of state authority encompass traditional state concerns such as land use. This dual regulatory scheme, extends even to matters related to nuclear materials, notwithstanding the broad preemption. The *PG&E* decision notes that federal law explicitly preserves state authority to regulate these activities for other purposes:

Nothing in this section shall be construed to affect the authority of any state or local agency to regulate activities for purposes other than protection against radiation hazards.

The Supreme Court's ruling and federal law thus reserves substantial jurisdiction to the state of Vermont over nuclear facilities and the dry fuel storage facility, so long as we are not regulating radiological safety and are acting within the areas of traditional state concern. These areas encompass the criteria in 30 V.S.A. § 248 and 10 V.S.A. § 6522(b). State authority remains unless in direct conflict with federal requirements.<sup>9</sup>

Accordingly, we conclude that we are not preempted from taking action in response to the leaks at Vermont Yankee, to the extent that the leaks may have economic and other non-radiological-health-and-safety consequences and to the extent that our action neither conflicts directly with the NRC's exercise of its federal jurisdiction nor frustrates the purposes of the federal regulation.

Unfortunately, none of the parties has presented a close analysis of the extent of any federal preemption focused on the specific facts presented here. Entergy VY merely asserts that the requested show-cause order would be based on preempted concerns over radiological health and safety, without addressing the possibility that the Board might retain authority related to economic and other non-preempted issues that may be consequential to the leaks. Both CLF and NEC contend that the leaks of radioactive materials and radionuclides result in environmental harm, but do not explain what that harm is or how it is distinct from matters of radiological health and safety.<sup>10</sup> NEC also asserts that there are economic implications to the leaks, in that they result in soil contamination that can significantly increase the costs of decommissioning Vermont Yankee and affect the future use of the site. But NEC does not address the extent to

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9. Docket No. 7082, Order of 4/26/06 at 15–16 (citations omitted).

10. We do not mean to suggest that there is no environmental harm from the leaks at Vermont Yankee that are distinct from radiological health and safety concerns, but only that CLF and NEC have not yet articulated such a distinction. We also acknowledge NEC's contention that the leaks may contain other, non-radioactive pollutants.

which a Board order requiring Vermont Yankee to cease operating might directly conflict with, or frustrate the purposes of, the NRC's exercise of its federal authority.

Based on the record and the pleadings to date, we conclude that CLF and NEC have presented at least a colorable claim that this Board is not fully preempted from exercising its state regulatory authority to take action in response to the leaks. It appears indisputable that the leaks may result in increased site contamination that could substantially increase decommissioning costs. Increased site contamination could also delay completion of the decommissioning process, which in turn could affect the future economic use of the site. These concerns do not fall within the preempted sphere of radiological health.

Whether the Board could order the shut down of Vermont Yankee in response to these concerns, or in response to environmental damage associated with the leaks, is less clear, and requires more extensive legal briefing by the parties. Even if we were ultimately to conclude that we were preempted from closing down the plant, however, there may be other non-preempted actions we could take to ameliorate economic and land-use impacts of the leaks.

Given the potential serious and substantial nature of those economic and land-use impacts, we conclude that it is appropriate for us to initiate an investigation into what action, if any, we can and should take in response to the leaks at Vermont Yankee. For this same reason we conclude that it is not appropriate for us to delay our proceeding, even with ongoing investigation and monitoring activities by the NRC and other state agencies.

Accordingly, we open an investigation, pursuant to 30 V.S.A. §§ 3, 30, 203, 209, 231, and 248 into whether Entergy VY should be required to cease operations at Vermont Yankee, or take other ameliorative actions, pending completion of repairs to stop leaks of radionuclides, radioactive materials, and, potentially, other non-radioactive materials into the environment. This investigation will also consider whether good cause exists to modify or revoke the CPG that the Board issued to Entergy VY pursuant to 30 V.S.A. § 231 on June 13, 2002, in Docket No. 6545, and whether any penalties should be imposed on Entergy VY for any identified violations of Vermont statutes or Board orders related to these releases.<sup>11</sup> Among the issues to be explored

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11. Potential penalties related to Entergy VY's failure to provide accurate information regarding underground piping will be addressed in Docket No. 7440.



in this investigation will be the extent to which federal preemption limits our authority to take action in response to the leaks.

**ORDER**

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. Pursuant to 30 V.S.A. §§ 3, 30, 203, 209, 231, and 248, an investigation is commenced into whether Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (collectively, "Entergy VY"), should be required to cease operations at the Vermont Yankee Nuclear Power Station, or take other ameliorative actions, pending completion of repairs to stop releases of radionuclides, radioactive materials, and, potentially, other non-radioactive materials into the environment. This investigation will also consider whether good cause exists to modify or revoke the Certificate of Public Good that the Board issued to Entergy VY pursuant to 30 V.S.A. § 231 on June 13, 2002, in Docket No. 6545, and whether any penalties should be imposed on Entergy VY for any identified violations of Vermont statutes or Board orders related to these releases.

2. Pursuant to 30 V.S.A. Section 10, the Public Service Board will hold a prehearing conference in this matter on Wednesday, March 10, 2010, commencing at 1:30 P.M. at the Public Service Board Hearing Room, Third Floor, Chittenden Bank Building, 112 State Street, Montpelier, Vermont.

Dated at Montpelier, Vermont, this 25th day of February, 2010.

<u>s/ James Volz</u>	)	
	)	PUBLIC SERVICE
	)	
<u>s/ David C. Coen</u>	)	BOARD
	)	
	)	OF VERMONT
<u>s/ John D. Burke</u>	)	

OFFICE OF THE CLERK

FILED: February 25, 2010

ATTEST: s/ Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*